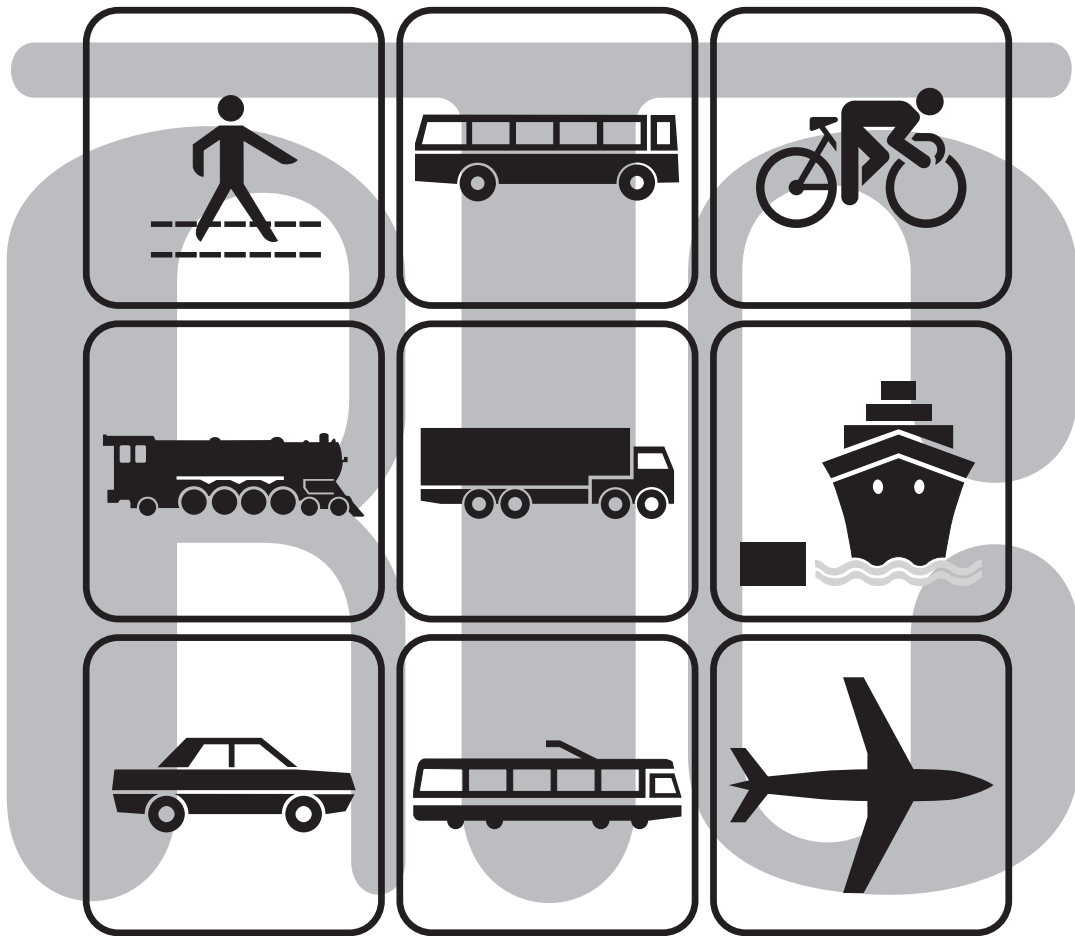


Metropolitan Transportation Plan for Clark County



**Updated: December 2002
Amended: December 2003**

Southwest Washington Regional Transportation Council

CHAPTER 6

PERFORMANCE MONITORING

The transportation planning process requires that monitoring of system performance take place. Several elements of system monitoring activities are described below.

GMA AND CONCURRENCY MANAGEMENT

Monitoring of the regional transportation system's performance is an ongoing activity for RTC. The GMA-required Concurrency Management System necessitates monitoring of transportation system performance to measure its performance against established Level of Service standards. Requests for future development have to be considered in light of the established Levels of Service for transportation facilities. If Level of Service standards cannot be met, then development can be halted or mitigation measures required. Concurrency management necessitates not only monitoring of transportation system performance but also requires tracking of development in the region and update of transportation modeling tools to ensure accuracy of data.

REGIONAL TRAVEL FORECASTING MODEL

RTC uses a regional travel forecast model to forecast future transportation needs. Performance measures, in terms of speed, vehicle miles traveled, lane miles of congestion and vehicle hours of delay are calculated within the model. The performance measures were reported on in Chapter 3 (Tables 3-13 through 3-16).

ISTEA CONGESTION MANAGEMENT SYSTEM

ISTEA required the development of a Congestion Management System (CMS) which is used as a tool for monitoring traffic congestion and for identifying improvement strategies to alleviate the congestion. The *Southwest Washington ISTEA Transportation Management Systems, Phase II Final Report* (May 1995), which contains the CMS, was adopted by the RTC Board on May 2, 1995 (RTC Board Resolution 05-95-14). The CMS network is a sub-set of the regional transportation system; a set of 21 transportation corridors to be monitored and evaluated on an ongoing basis as part of the CMS.

The Congestion Management Monitoring project focuses on delivering improved transportation system performance information to decision-makers who must identify the most cost-effective strategies for addressing transportation congestion and improving mobility. Each year additional transportation data is collected, transportation system performance is analyzed, and a System Performance Report is prepared. Congestion management report performance measures include a corridor congestion ratio, speed as percent of speed limit, auto vehicle occupancy, truck percentage, and transit seat capacity used.

In August 2002, the RTC Board adopted the *2001 Congestion Management Report*. As part of the ongoing monitoring process, the Corridor Congestion Ratio Index (CCRI) numbers were updated to reflect 2001 traffic counts collected as part of the Congestion Management Monitoring program. The following table (Table 6-1) reports Corridor Congestion Index results from the 2001 counts. In general, there was little change between the 2000 and 2001 counts. However, some of the more notable differences noted between the 2000 and 2001 reports were significant traffic growth in the I-205 corridor between SR-500 and Padden Parkway, a decrease

in speed in the PM peak for I-5 North, I-205, SR-503 South, Fourth Plain Central, Padden Parkway, Burton/28th Street, and 18th Street and increase in vehicle occupancy in the I-5 south corridor. The increase in vehicle occupancy could be a result of the implementation of the I-5 HOV lane opened to traffic in November 2001. Elsewhere there has been a vehicle occupancy decrease that may be reflective of the economic slowdown. Some of the corridors showing higher congestion have widening projects programmed in the next few years that could relieve some of the congestion e.g. Burton Road and Ward Road. Also, some of the corridors, such as Fourth Plain and Burton Road, had construction activity underway in 2001 that affected the speed reported in the 2001 Report.

Table 6-1: Corridor Congestion Index Report

CORRIDOR CONGESTION INDEX IN A.M. AND P.M. PEAK (2001 REPORT)					
Corridor Name	Facility Name	Start Point	End Point	A.M. Corridor Congestion Index (CCI)	P.M. Corridor Congestion Index (CCI)
Shaded Cells = Corridor Congestion 7.0 or Greater					
I-5 - North	I-5	County Line	I-205 Junction	0.49	0.57
I-5 - Central	I-5	I-205	Main St	0.97	.99
I-5 - Central	Hwy 99	134 th St	Main St	0.36	0.60
I-5 - Central	Hazel Dell	117 th St	Main St	0.35	0.63
I-5 - South	I-5	Main St	State Line	.92	0.98
I-5 - South	Main St	I-5	Fourth Plain Blvd	0.42	0.48
I-205 - Central	I-205	I-5	SR-500/4 th Plain	0.77	0.87
I-205 - South	I-205	SR-500/4 th Plain	State Line	1.01	1.03
I-205 - South	112/Chkalov/Gher	SR-500	Mill Plain	0.49	0.67
Grand/St. Johns	St. Johns/Ft. Vanc	NE 72 nd Ave	Fourth Plain Blvd	0.53	0.53
Andresen Rd - North	Andresen/ 72 nd	119 th Street	SR-500	0.51	0.68
Andresen Rd - South	Andresen Rd	SR-500	Mill Plain	0.46	0.70
SR-503 - South	SR-503	119 th Street	Fourth Plain	0.75	0.91
SR-503 - North	SR-503	SR-502	119 th Street	0.66	0.61
Ward Road	Ward Road	119 th Street	SR-500	0.94	0.88
162 nd /164 th - North	162 nd Ave	Ward Road	Mill Plain	0.53	0.57
162 nd /164 th - South	164 th Ave	Mill Plain	SR-14	0.87	0.91
SR-14 - West	SR-14	I-5	I-205	0.85	0.85
SR-14 - Central	SR-14	I-205	164 th Ave	1.09	0.96
SR-14 - East	SR-14	164 th Ave	County Line	0.73	0.73
Mill Plain - West	Mill Plain Blvd	I-5	I-205	0.44	0.58
Mill Plain - East	Mill Plain Blvd	I-205	164 th Ave	0.68	0.90
Fourth Plain	Fourth Plain	I-5	TMA/Vanc Lake	0.34	0.45
Fourth Plain	SR-501/Mill Plain	I-5	Fourth Plain	0.52	0.48
Fourth Plain	Fourth Plain Blvd	I-5	Andresen	0.37	0.63
Fourth Plain	Fourth Plain Blvd	Andresen	SR-503	0.39	0.81
SR-500 - West	SR-500	I-5	Andresen	0.82	0.85
SR-500 - Central	SR-500	Andresen Rd	SR-503	0.87	0.96
SR-500 - East	SR-500	SR-503	162 nd Ave	0.84	1.00

CORRIDOR CONGESTION INDEX IN A.M. AND P.M. PEAK (2001 REPORT)					
Corridor Name	Facility Name	Start Point	End Point	A.M. Corridor Congestion Index (CCI)	P.M. Corridor Congestion Index (CCI)
Shaded Cells = Corridor Congestion 7.0 or Greater					
78/76/Padden Pkwy	78 th /76 th	I-5	SR-503	0.51	0.72
78/76/Padden Pkwy	Padden Pkwy	Andresen Rd	SR-503	0.54	0.55
28 th /18 th Street	Burton/28 th	Andresen Rd	164 th Ave	0.83	1.00
28 th /18 th Street	18 th Ave	112 th Ave	164 th Ave	0.59	0.64
134 th /139 th Street	134 th /139 th	NW 36 th Ave	50 th Ave	0.56	0.69
SR-502/219 th St	SR-502	I-5	SR-503	0.73	0.88
SR-501	SR-501	I-5	9 th Street	0.29	0.24
La Center Road	La Center Road	I-5	E. Fork Lewis R.	0.50	0.62

AIR QUALITY MONITORING

Monitoring of air quality standards is an ongoing activity in the Air Quality Maintenance Area (AQMA) for the region. This relates directly to the transportation system and its performance because mobile source emissions are a large contributor to air pollution. The Air Quality Maintenance Plans for carbon monoxide and ozone include emissions budgets which have been developed, and must be met, to ensure that air quality standards continue to be maintained.

COMMUTE TRIP REDUCTION (CTR) LAW IMPLEMENTATION

All jurisdictions in Clark County with affected employers of over 100 employees who meet the set criteria have adopted CTR ordinances and employers have established commute trip reduction programs. Monitoring of the success of these programs is carried out to ensure that the goals are being met. Washington law established a goal of affected employers achieving 15% work trip reduction by the year 1995 or 2 years after program implementation, 20% reduction by the year 1997 or 4 years after program implementation, 25% reduction by the year 1999 or 6 years after program implementation and 35% by 2005 or 12 years after program implementation.